

PSA - WHAT'S IN IT FOR ME?

(From P. 1)

graphers all over the world. This kind of work will not be new to Jack, however; he has for several years been an enthusiastic organizer and leader in the growing ranks of stereo enthusiasts. The answer is the same for leaders of any fraternity or society, simply sheer love and pleasure in helping others to get more out of life. The big job isn't done alone. A mark of leadership is the ability to pick men and women to take over and be responsible for details of running an organization. Let's take a look at the PSA Stereo Division structure for 1957: Working with Jack Stolp, Chairman, are GLEN THRUSH, Denver, Colorado (MSC Honorary Member), who is Vice-Chairman; DOROTHEA VAN WESTRIENEN, of Chicago, is Treasurer; and WALTER GOLDSMITH, New York, is Secretary. Jack's team for the year includes names well known to many of us: In charge of exhibitions is AMER LEW MILLER, of Chicago; new editor of the Stereo-Gram is TONY BRUCULERE of Rochester; another AMER, RUTH BAUER, Cincinnati, is the new keeper of "Who's Who in Stereo". Every one of these people has been chosen for the privilege of helping others and that will be their only reward for what they will do well this forthcoming year.

IT IS THIS spirit, then, that compels whole families to pack their bags, shuffle off 2000 miles to Denver, and spend a week personally meeting people they have read about in PSA and club publications in the past. As in our own club, here at MSC, though on a national scale, they find a group of new faces that soon become old friends, bonded to-

stereography. From then on it is easy, plans are usually made on the spot to meet again "next year"... (1957, St. Louis). Words have not the power to express the warmth and importance of friendships, but PSA, as does MSC, opens the door to make such real pleasures possible.

THE PEOPLE who get the most out of societies and clubs are the

"doers", the people who work at it, not just "go along for the ride".

A WELL-ORGANIZED club should have a job for everyone who wants one. It doesn't really matter how insignificant or how important the task may be, they all have to be done. It is by this kind of participation that the real rewards of membership are reaped. So, PSA becomes a great field of photography made up of active minds and busy workers who have banded together to help each other. We at MSC support this society by membership as a club, and still further by individual memberships from many of our members, and we as a club and as individuals are the richer for it. We urge every MSCer who would gain more enjoyment from his stereo camera to become an active part of the largest photographic club in the world.

TECH-STEREO - CONCLUDED

the results compared. Also the viewing distances are not critical, and effects in variation of the distance should be observed.

A continuation of this disquisition in future issues of the News will deal with depth of field and other factors of interest, and also certain interpretations and extensions of the principles described herein. The author will be pleased to receive comments from those trying out these ideas, and to explain any points which may be obscure.

E70IN SHRIDL

YE EDS HAVE TAKEN NOTE OF DESERVED CHASTISEMENT FROM FELLOW ED "RED" DUNNIGAN, DETROIT, ON FLUBBING THE "JUMPS" ... NOW WE KNOW WHAT "JUMPS" ARE WE'LL DO BETTER....DEEP BOWS TO MSCER DON BENNETT, OF PSA JOURNAL, AND "SKIP" MILLER, OF N.Y. W-T & SUN, for the FELLOWSHIPS AWARDED THEM BY PSA HONORS COMMITTEE at DENVER CONVENTION....OCTOBER FIELD TRIP IN PURSUIT OF FALL COLOR TO BE ANNOUNCED AT OCT. 12 MEETING, OR CALL LISA O.-AUSTRALIAN "SLIDE-IN-A-LETTER" EXCHANGE NAMES AND ADDRESSES AVAILABLE FROM (MISS) TIM NESBITT AT MTG.

METROPOLITAN
STEREO CLUB

NEWS

VOL 1

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NO 11

PSA OR-WHAT'S IN IT??
FOR ME ??

SOMETHING LESS than half of MSC membership are active, participating members in the Photographic Society of America. A checkback through back issues of the NEWS will tell who's who. The rest may wonder just what PSA is, and, frankly, "what's in it for me that is worth \$10 a year?". On several occasions, Lou Frohman, MSC VP-PSA Liaison officer, has told us about the many services, such as stereo slide Circuits, competitions, local meetings and national conventions. What is not so easily understood, perhaps, is the underlying enthusiasm of photographers in general, and stereographers in particular that causes them to band together under the guidon of a national organization whose sole purpose, in our words, is to get more thorough enjoyment and sociability out of photography, to be able to prove our own efforts and test, if we desire, with the best workers in the amateur ranks. For, although PSA contains professionals in great numbers, by far the largest majority are "Simon Pure"s of the first order.

MSCers who attended the judging of the Emde Stereo Award Contest, at the September meeting, were privileged to meet JACK STOLP, the new Chairman of the Stereo Division, PSA. We might well ask ourselves "What is it that causes a busy man in unrelated fields, such as Jack is, to assume the responsibilities of leadership and direction of several thousand screwball stereo

TECHNICAL PRINCIPLES
OF STEREO - PART II

BY Paul S. Darnell

IN CONTINUING this article on "Some Thoughts on the Technical Principles of Stereo", attention will be given next to the specific conditions which should apply in photographing and projection to result in close-up stereograms characterized by correct depth relations, undistorted perspective, and freedom from viewing difficulties. That is, the view seen on the screen by the observer will be orthostereoscopic in character even though this view may be a highly magnified replica of the original object. In this presentation, the conditions leading to such an orthostereoscopic result will be stated in terms of three particular magnifications each defined as follows:

1. The linear magnification, denoted by the symbol M_c , at which the stereo transparencies are taken with the camera. This magnification is determined by the point in the object or scene nearest the camera lens and by the focal length of the lens. That is M_c is the ratio of the distance I of the image on the film from the effective optical center of the camera lens, to the distance O_n from the lens center of the nearest point in the object or scene. Hence it may be written

$$M_c = \frac{I}{O_n} \quad (a)$$

(Cont. P. 6)

(Cont. P. 8)

STEREO AT WORK

STEREO CAN PLAY an important role in useful service, as seen in a segment from a story created for a purpose in Detroit.

THOSE WHO saw the honor-winning sequence story "The Mass" in the Emde Stereo Award Contest will remember the 5-slide story of a ritual in a Christian church. The hope was expressed in the Sept. MSC NEWS that we might see a story around Yom Kippur, or other religious themes. Such stories are charged with emotional interest to many ... witness the successful series in Life recently, and Lew Ayers films on "Religions of the East".

THE REVEREND CARL J. GROTH, of St. Elizabeth's Church, Detroit, with the assistance of his brother, David Groth, created his series of slides for a purpose, and won national acclaim for it as a stereo effort -- incidentally. But we'll let Father Groth tell about it:

"The five slides that I entered in the contest are a part of a series of 40 that I executed for use in my adult instruction class. These adults are investigating the Church with a view to joining it, and I was instantly aware of the tremendous visual aid that projected stereo slides would be. The entire project required 15 hrs. of planning, 10 hrs. of shooting, and 5 hrs. for mounting.

"When I read of the competition, I chose five out of this series, composed the narration and sent them in. I used my brother's name because sometimes people find it difficult to be objective about the merit of the work a Priest does outside of his principal field; and I was immoderately curious to see how this subject and my efforts would stand up under severe and objective criticism.

I fully expected criticism about the weakness of the "story line" in my sequence; I considered it the weakest element of the series. I did not expect criticism on the lighting, but your notes concerning it make me understand and agree with you."

N.Y. INTERNATIONAL SALON?

IT HAS long been the dream of stereographers here in the East that New York City would establish an international stereo salon. A recent letter from AMER LEW MILLER, Exhibitions Director of PSA Stereo Division, pins his hopes for such a salon in the strength that MSC is building up. That we should sponsor an international stereo salon either on our own or in conjunction with some worthy charity is more than an idle thought. It is a project that deserves consideration by a serious and purposeful club such as we are. Chicago has one of the greatest stereo salons in the world, held exclusively for the benefit of the Lighthouse for the Blind, a most worthy cause. It is not only a highly successful exhibition salon, it is the background of a substantial fund-raising drive for the Lighthouse. The high standards of acceptance established there have become a pattern for other salons world-wide. This exemplary exhibition was originated by, backed by and manned by the enthusiastic Chicago Stereo Camera Club. Can we at MSC find a better example for ourselves? If it is the wish of our membership to undertake this worthwhile project, let us not lose any time in getting the ball rolling. Think it over, each of you, and be ready to express your opinions at the next meeting.

SWAP OR TRADE

AMER RUSSELL EDWARDS, 515 Mabbette St., Kissimmee, Fla., wants to "swap" slides, on loan or otherwise, of any subjects of general interest. Mail some to him and he'll return them, with interest. Let us know how it works out.

WE THANK you, Father Groth, for your comments on your splendid series. We publish them, as an inspiration to others to accept the challenge of telling a story in stereo with a punch .. human interest.

TECH-STEREO — That is, he should be at a distance from the screen such that the angle P (see diagram) subtended at his eyes by the image view on the screen is the same angle P as was subtended by the actual view at the camera lens when the photograph was taken. This condition obtains when

$$\text{Viewing Distance, } Vd = Mp \times I \quad (d)$$

where Mp is the projection magnification as defined in 2 above, and I is camera image distance as stated in 1. I can either be measured or be computed. In a camera set-up using a bellows or extension tubes with a lens of focal length F millimeters, for all practical purposes

$$I = (1 + Mc) \times F \text{ mm} \quad (e)$$

Putting (d) and (e) together, the proper viewing distance Vd becomes

$$Vd = Mp \times (1 + Mc) \times F \text{ mm} \quad (f)$$

Expression (f) shows that the proper distance of the observer from the screen depends upon Mp, Mc and F, thus again tying the viewing conditions in with the photographing conditions.

To conclude this phase of the discussion, two suggestions for trial set-ups will be given, based on the foregoing principles.

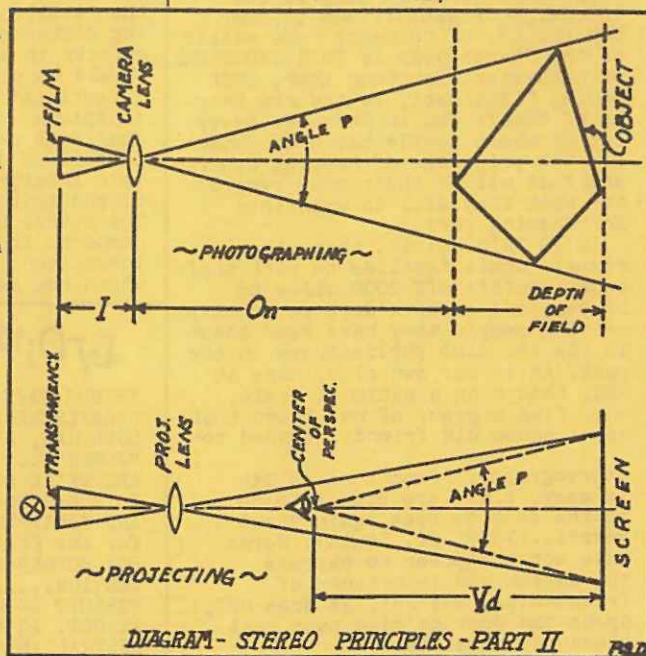
A. Lens focal length F of 35mm. Camera focusing scale set for distance of 30 in. (762mm). $I = 36.7\text{mm}$. Depth of field is about 660mm at stop setting f/22. Assuming the plane of principal focus to be at $1/3$ of the depth of field, the nearest point of object in focus is 540mm from camera lens and the farthest point 1200mm. Hence, Mc by expression (2) is 36.7 divided by 540 or about $1/14.7$. This assumes the nearest point in subject is placed at 540mm from camera lens.

For a projection magnification Mp of 50, Mt is 3.4 and so the lens separation by expression (c) is practically 18 mm. Viewing distance from (d) is 1835mm or about 6 feet.

B. Lens focal length F of 35mm with a -3 supplementary lens. Camera focusing scale set at infinity. Depth of field at stop f/22 is about 150mm (6 inches). Place nearest object point at 280 mm from supplementary lens. Most distant point in focus is 430 mm. Mc is about $1/8$. For a projection magnification Mp of 50, Mt is 6.25 and so the lens separation becomes 10mm. The proper viewing distance Vd is about 6 feet.

In trying out examples A and B, or any other cases based on the above relations, it is suggested that lens separations ranging from $1/2$ to 2 times those indicated by formula (c) be used in addition to that indicated by the formula, and

(Cont. P.8)



TECH-STEREO

(From P. 1)

Depending on the subject being photographed, the value of M_c might range from 1/20 to 1, and perhaps up to 10 in macrophotographic work.

2. The linear magnification, denoted by the symbol M_p , at which the stereo transparencies are projected. One measure of this magnification is the ratio of the vertical dimension of the image on the screen to the vertical dimension of the mounting mask opening containing the transparency. M_p is a function of the projection setup, and so is likely to depend upon the size of screen used. For example, with a 48 inch square screen, and with a mounting mask opening of 23mm wide x 24mm high, the maximum projection magnification would be 51. For a 72 inch square screen, the figure is 76.

3. The total effective linear magnification, denoted by the symbol M_t , of the image on the screen referred to the original object. To illustrate, if the measured distance between two particular points in the object photographed is just one inch, and the distance between these same two points in the screen image (use the image from only one transparency for this check) is exactly 10 inches, then M_t is 10. If the latter distance were 5.3 inches, for example, then M_t would be 5.3, and so on. The total magnification M_t is the product of the camera magnification M_c and the projection magnification M_p ; that is

$$M_t = M_c \times M_p \quad (b)$$

Hence when specific values are assigned to any two of these magnifications, the third is determined by relation (b).

The details of the reasoning and analysis leading to the following expression for lens separation expressed in terms of these three magnifications will not be given here, but the author will reproduce them for anyone interested.

Suffice to say, the approach is based on first determining the proper relative spacing of the L and R points on the screen for particular conditions of Cases A, C, G and E described in the previous section of the article and then investigating the relations to be observed in the camera set up when taking the pair of transparencies to insure that these proper relative spacings are obtained in the projected images. However, this is only one of several approaches that may be followed.

Therefore, taking the distance between the pupils of the eyes as 62.5 millimeters (mm), the proper lens separation LS is derived on the basis of the above approach to produce the desired stereo perspective in the close up views is very simply

$$LS = \frac{62.5}{M_t} = \frac{62.5}{M_c \times M_p} \text{ mm} \quad (c)$$

This expression is of major interest as it reveals the principal factors controlling the lens separation are the interpupillary distance of the eyes, and the total overall magnifications. For example, if M_c is 1/5 and M_p is 50, so that M_t is 10, LS is 62.5mm or just about 1/4 inch. If M_c is unity (image on film same size as object) and M_p is 50, then M_t is also 50 and LS becomes 1.25mm or 1/20 inch. This lens separation is based on keeping the optical axes of the camera lens or lenses parallel, without any toeing in or convergence. It is seen from (c) that the photographing conditions and the viewing conditions are interdependent, and hence the translation of the pictures of the subject to the screen is an integrated operation and not two separate unrelated actions involving the camera and the projection.

Another factor on which the derivation of the proper lens separation is based, and which should be observed to create the proper perspective in viewing, is the distance of the observer from the screen. For the best impression, he should be located at the center of perspective fixed by the photographing conditions. (Cont. P. 7)

3 SEPTEMBER IN REVIEW

EMDE STEREO AWARD
WON BY WIGGEN'S MIRACLE

THE SEPTEMBER MEETING OF MSC featured the judging of the EMDE STEREO AWARD CONTEST, a PSA national event.

THE FIRST AWARD of \$200 in cash went to FRED WIGGINS, JR., of Chicago, Ill., for a 21slide sequence story called "The Miracle of the Monarch". Beginning with the tiny egg the size of the head of a pin, we followed this story of life through the development of the colorful series of slides almost entirely done in a seldom-witnessed excellence of macro stereo. As the story unfolded through the birth of the caterpillar, its foraging for food, and ultimately the detailed transformation of the caterpillar into the golden and bejeweled chrysalis, the slides' exquisite composition and dramatic lighting seemed to emphasize the drama we beheld. The story carried through to its completion, the emergence of the fully developed and gorgeously colored butterfly, a Monarch ready for flight, ready to begin the life-cycle all over again. This biological documentary was so successfully and beautifully executed as to captivate and hold the interest of the audience throughout the telling of the story. We feel it to be a great step forward for stereo, and worthy of the highest award, which it so deservedly won.

"STORY OF A BRIDGE"

THIS SEQUENCE, by Rolland Jenkins, was a 12slide presentation, rich with salon pictorials, of the George Washington Bridge. Its individual slides were linked by a story of the bridge's purpose and usefulness, as well as its beauty. A definite personality grew from an inanimate object, as form, line, light and design were used to signify the importance of this great artery that connects two states.

THE FINAL decision between these two great stories was a hard task for the panel; both contained extraordinary merit, originality and technical excellence. From these two classic examples of different kinds of sequences, we begin to see the unlimited expectations of the future. What a great satisfaction it must be to have accomplished such excellent work.

LISTED BELOW ARE THE five honor award winners, of \$25.00 each, without reference to placement, and all of equal standing:
"From Eag to Eagle" by Kim Clark
Kodiak, Alaska
"The Mass" by Rev. Carl J. Groth
Detroit, Mich.
"Out of The Distant Past" by Jean Brooks, Palisades Park, N.J.
"The Joy of Cooking" by Lee Hon,
New York City
"The Date" by Paul Wolfe, Butler,
Penna.

The panel also unanimously wished to include four additional citations of merit to the following entries, whose photographic excellence or story-telling qualities were considered particularly worthy of commendation:

"The Fountains of Rome" by Karl Struss, Hollywood, Cal.
"A Day on a Lake" by Sunny Terry,
Leonia, N.J.
"Birth of an Open Hearth", by
Carl Bartley, Parma, Ohio
"Hoopla" by Dorothea Van Westrienen,
Chicago, Ill.

At the prejudging in the afternoon the judging panel consisted of: JACK DESCHIN, author of many books on photography, salon judge, and Photo Editor of the New York Times; JACK STOLP, Chairman, Stereo Div., PSA, guiding hand behind the Rochester International Salon, top competitor in stereo, and experienced judge; and BART BROOKS, photographic consultant, writer and salon judge. At the finals in the evening, MABEL SCACHERI, Photo Editor of the N.Y. WorldTelegram and Sun, salon judge and writer on photography, replaced Jack Deschin, who had to leave because of an unexpected emergency. Special thanks

(Cont. P. 4)



METROPOLITAN Stereo Club NEWS is published monthly in the interests of stereo information and education, for the benefit of MSC members and their friends in stereo. It is sent to all listed stereo clubs throughout the country. We hope these clubs will send us their publications, and will feel free to make use of any information contained in MSC NEWS that will be helpful to their members. We will, of course, appreciate credit to MSC NEWS or recognition of any by-line on articles used. We believe this exchange of ideas, activities, tech data, etc., will aid program planners everywhere to increase the scope of club activities. Contributions should be addressed to JEAN AND BART BROOKS, Acting Editors, 258 Broad Avenue, Leonia, New Jersey. Windsor 4-4387. Any copy accepted is subject to whatever adaptation and revision may be necessary.

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Member

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MSC NEWS

IN REVIEW.... (From P. 3)
are due to DICK NOEL, veteran CBS radio and TV personality, creator of "Funny Bunny" and many other roles, for his beautiful reading of the narrations. Further credits for the excellent presentation go to CBS, who supplied a four-mike public address system for most complete audience enjoyment, and to LEE HON, Chairman of MSC's Exhibition and Competitions committee, and MARGE HON, and their committee, who handled the monumental task of paper work and organization, as well as projection of the sequences.

THE EMDE STEREO AWARD contest was a challenge to each of us to search within himself for greater imagination, creative abilities and originality, exploring an entirely new idea in stereography.. sequences. We have received word from JOE SIMPSON, President of EMDE that the award is available for a continuation of next year's contest, and we feel that the first year's experience has led the way to stimulation of even greater interest next year in the wider fields of creative stereography. An Emde Stereo Award participation will rank among the highest honors to be sought after in the photographic world.

MSC is very proud of the part it played in this contest, and privileged to have witnessed the judging and seen the entries, not only those adjudged superior, but the many worthwhile ideas that did not quite come up to the makers' expectations.

There were many entrants who did not achieve the charmed circle of recognition, and to each one a letter was sent when the slides were returned, expressing the Committee's thanks for participation, and a summary of the judges' comments, taken from notes made during the judging. This somewhat unusual and tedious procedure was felt justified by the amount of thought and effort expended by entrants, and the desire of the judges to encourage entrants' support of this most unusual and challenging event.

MSC NEWS

5

METROPOLITAN STEREO CLUB PROGRAM

ARCHITECTURAL LEAGUE

115 EAST FORTIETH STREET N.Y.C.

OCT. 12TH

MEETS SECOND FRIDAY OF EVERY MONTH-PUBLIC INVITED

7:30 P.M. STEREO SCHOOL "CAMERAS"-HOW THEY WORK-HOW TO USE THEM FRANK PORTER-INSTRUCTOR

MSC'S new "SCHOOL OF STEREOGRAPHY" will present 6 lectures at 7:30 PM. on each of the next 6 regular meeting nights, beginning with the October meeting. Instructors will be qualified MSC members and guest speakers. The course is free to MSC members. The curriculum will be:

OCTOBER: "CAMERAS"- How they work, and how to use them.
NOVEMBER: "EXPOSURES" - Calculations, use of light meters, guide numbers, compensation, mixed lighting
DECEMBER: "COMPOSITION" - Line, mass, and depth; picture structure, lines as symbols
JANUARY: "COLOR" - Harmonies, prime and complements, use and meaning of color in pictures
FEBRUARY: "THE PICTURE" --"Points of View", with illustrated panel discussion
MARCH: "CRITIQUES" - Class assignments on three themes, pictures based on (a) "line" (open); (b) "color" (open) and (c) "a picture with a story" (assigned).

8:30 PM MSC SLIDE COMPETITION PANEL FROM MSC SCHOOL FOR JUDGES

S.S. FAIN PAUL DARNELL FRANK PORTER RICHARD JEFFERSON
DON FORRER

COMPETITION BY MEMBERS ONLY. PLEASE SUBMIT THREE GLASS-MOUNTED PROPERLY IDENTIFIED FOR PROJECTION

NEW MEMBERS

ESTELLE STONE, 115 East 72nd St.,
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CHRYSTAL DUNNINGER, 41 West 72nd
St., New York City
ASSOCIATE MEMBERS
*FRED WIGGINS, JR., APSA, 638 S.
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72nd Place, Chicago, Ill.
RUSSELL EDWARDS, 515 Mabbette St.,
Kissimmee, Florida

* Member, PSA

WANT TO JOIN ?

MSC MEMBERSHIP IS OPEN TO ALL WHO ARE INTERESTED IN STEREOGRAPHY AS AMATEURS OR PROFESSIONALS, NOVICE OR EXPERT. YOU ARE INVITED TO ATTEND ANY REGULAR MEETING TO GET ACQUAINTED. DUES ARE \$10.00 INDIVIDUAL OR \$15.00 FOR JOINT HUSBAND AND WIFE MEMBERSHIP ON A CONTINUING 12-MONTH BASIS. ASSOCIATE MEMBERSHIP FOR THOSE UNABLE TO ATTEND REGULAR MEETINGS \$5.00 PER YEAR. PLEASE WRITE FOR OR REQUEST APPLICATION BLANK AT MEETING.